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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,298	07/10/2003	David Brault	84215-402 ADB	1617

23529 7590 10/20/2005

ADE & COMPANY
1700-360 MAIN STREET
WINNIPEG, MB R3C3Z3
CANADA

EXAMINER

GELLNER, JEFFREY L

ART UNIT PAPER NUMBER

3643

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,298

Applicant(s)

BRAULT ET AL.

Examiner

Jeffrey L. Gellner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-17 and 20-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 and 37-46 is/are allowed.
- 6) ☒ Claim(s) 1,3,6-10,13-17,20-25,28,29,31,32,35 and 36 is/are rejected.
- 7) ☒ Claim(s) 4,5,11,12,26,27,33 and 34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The indicated allowability of claims 1, 3, 6-10, 13-17, 20-25, 28, 29, 31, 32, 35 and 36 is withdrawn in view of the newly discovered reference(s) to Meckler (US 5,279,609). Rejections based on the newly cited reference(s) follow. Examiner regrets any inconvenience to Applicant.

Claim Rejections - 35 USC §103

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 6-10, 13-17, 20-25, 28, 29, 31, 32, 35, and 36 are rejected under 35 U.S.C. §103(a) as being unpatentable over Takano (JP2000-69858) in view of Sonoda et al. (JP4-16131) in further view of Meckler (US 5,279,609).

As to Claims 1, 20, and 31, Takano discloses a climate control system for use with a greenhouse (Figs. 1,2, and 4) having an exterior wall of transparent panels comprising a bench (best shown in Fig. 4) arranged to provide a support surface; and, an air handling system (shown in Figs. 1 and 2) comprising an air intake plenum (7 and 8 of Fig. 1) having at least one air intake (8a of Figs. 1 and 2), a fan (6 of Fig. 1) connected to the plenum, an outlet duct (generally around 10 of Fig. 1) connected to the fan having an air outlet (11 of Fig. 1) from the outlet duct into the interior of the greenhouse, and at least one air conditioning component (9 of Figs. 1 and 2) for conditioning the air transported from the plenum to the outlet duct by the fan, the plenum

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including at least a part thereof mounted underneath the bench (Figs. 1 and 4). Not disclosed is the plenum forming at least a part of a support for the bench and a plurality of air handling systems each associated with a respective bench (one to one association). Sonoda et al., however, disclose a plenum mounted underneath a bench and forming at least a part of a support for the bench (4 and 15 of Fig. 2 in that 15 is connected to the bench though 15); Meckler discloses a plurality of air handling systems each associated with a specific area (Fig. 1 and col. 3, lines 34-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Takano by having the plenum forming at least a part of a support for the bench as disclosed by Sonoda et al. so as to get the plenum off the ground so as to allow for easier cleaning/maintenance and to have a plurality of air handling systems as disclosed Meckler so as to serve separate comfort air spaces (see Meckler at col. 1 lines 5-10) and to have a correspondence between benches and air handling systems so as to achieve a micro-climate for each bench so as to optimize plant growth on each bench.

As to Claim 3, Takano as modified by Sonoda et al. and Meckler further disclose the air intake plenum under the respective one of the benches (Takano at Figs. 1 and 2).

As to Claims 6 and 21, Takano as modified by Sonoda et al. and Meckler further disclose the outlet duct including a vertical duct section at one end of the bench (region above 6 in Fig. 1 of Takano).

As to Claims 7 and 22, Takano as modified by Sonoda et al. and Meckler further disclose a horizontal discharge duct section and extending over the bench (Fig. 2 of Takano).

As to Claims 8 and 23, the limitations of Claims 1 and 20, respectively, are disclosed as described above. Further disclosed is the tube flexible (Fig. 1 of Sonoda et al.). Not disclosed is

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the tube shaped to form an elliptical cross section that is wider than it is high. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of Takano as modified by Sonoda et al. and Meckler by having the tube shaped to form an elliptical cross section that is wider than it is high depending upon cost and availability of tubing.

As to Claims 9, 10, 24, and 25, the limitations of Claims 1 and 20, respectively, are disclosed as described above. Not disclosed is a heating or cooling coil in the plenum underneath the bench. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of Takano as modified by Sonoda et al. and Meckler by having a heating or cooling coil in the plenum underneath the bench so as to moderate the temperature in the greenhouse so as to optimize plant growth.

As to Claims 13 and 28, Takano as modified by Sonoda et al. and Meckler further disclose a fan in a housing at the end of the bench (5 of Fig. 1 of Sonoda et al.).

As to Claims 14 and 29, Takano as modified by Sonoda et al. and Meckler further disclose a air flow connection arranged in communication with a sidewall (Fig. 1 of Takano).

As to Claim 15, the limitations of Claim 1 are disclosed as described above. Further disclosed are two inlets (8a of Fig. 2 of Takano). Not disclosed is one at each side and at the end. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of Takano as modified by Sonoda et al. and Meckler by having inlets, one at each side and at the end so as to meet a particular grower/plant species need.

As to Claim 16, Takano as modified by Sonoda et al. and Meckler further disclose a fogging nozzle (17 of Fig. 2 of Sonoda et al.) in the plenum underneath the bench.

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As to Claim 17, Takano as modified by Sonoda et al. and Meckler further disclose the water under pressure, pump, and a control system (inherent in Sonoda et al.).

As to Claim 31, Takano as modified by Sonoda et al. and Meckler further disclose the plenum mounted underneath the bench (4 and 15 of Fig. 2 of Sonoda et al.) and at least a part of the support therefor ((4 and 15 of Fig. 2 in that 15 is connected to the bench though 15).

As to Claim 32, Takano as modified by Sonoda et al. and Meckler further disclose the bench being rectangular (see Figs. 1 and 2 of Takano).

As to Claim 35, Takano as modified by Sonoda et al. and Meckler further disclose the outlet duct including a vertical duct section at one end of the bench (region above 6 in Fig. 1 of Takano).

As to Claim 36, Takano as modified by Sonoda et al. and Meckler further disclose a horizontal discharge duct section and extending over the bench (Fig. 2 of Takano).

Allowable Subject Matter

Claims 30, and 37-46 are allowed over the art of record.

Claims 4, 5, 11, 12, 26, 27, 33, and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

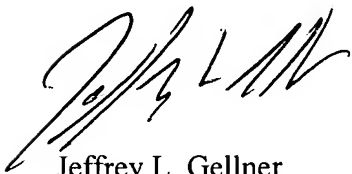
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Gellner whose telephone number is 571.272.6887. The

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examiner can normally be reached on Monday-Friday, 8:30-4:00, alternate Fridays off, if attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 571.272.6891. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey L. Gellner
Primary Examiner
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